Evaluation in Lean Times: Approaches and Strategies

Madeleine F. Wallace, Ph.D.

NIH Program Evaluation Special Interest Group Meeting

April 10, 2013 Bethesda, MD

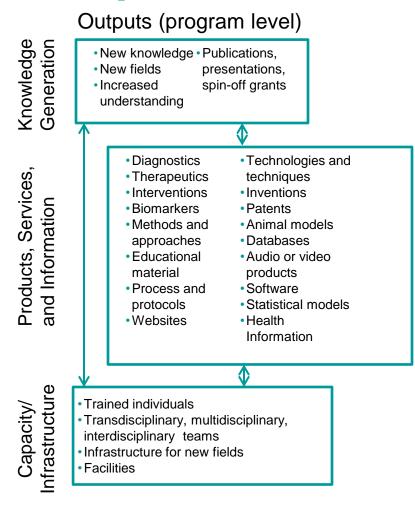


Outline

- Evaluation challenges
- Prospective evaluation
- Timeline for data collection
- Programs suitable for prospective evaluation
- Prioritizing programs for formal evaluation
- Discussion



Examples of NIH Outputs and Outcomes



Early/Intermediate Outcomes (program level)

- Knowledge utilization
- Clinical guidelines
- New and varied disciplines contributing to research
- Changes in focus of research
- Influence development of new products
- Use of products in other fields
- Adaptation of products in other fields
- Adoption of developed products
- Satisfied users
- Career promotions

Impacts (society)

Health

- Increase life expectancy
- Decrease mortality, morbidity
- Reduce burdens of illness and disability
- Improve quality of life

Economic

- Job creation
- Growth of biotechnology, bioscience industry

Policy and Regulations

Contextual Factors: unpredictable and non-linear nature of R&D, changes in regulatory requirements, etc.



Evaluation Challenges

- Unclear logical framework analysis (e.g., program theory, logic models, logframe) in the planning phase resulting in broad goals and objectives
- Limited time and resources to conduct evaluations
- Data collected at the end of the program may be incomplete and too late to make changes to the program
- Delays in OMB clearance affecting data collection timeframe
- Data cleaning is labor intensive



Prospective Evaluation

Before policies or programs are implemented

- Policy Alternatives (e.g., GAO)
 - Consider readiness to implement
 - Predict costs and benefits
 - Compare alternatives
 - Possible outcome: Choose or reject a program or policy
- Ex-ante evaluation (e.g., European Commission)
 - Align program outcomes with long-term national policy and strategy
 - Conduct in-depth problem analysis and needs assessment
 - Consider cost and risk and includes future evaluation and monitoring
 - Possible outcome: Approve proposal and validate indicators

Between funding cycles, and during implementation

- Collect data at defined points and feed data back to the program
- Possible outcome: Establish baseline and make real time improvements based on data



Prospective Evaluation: Key Features

Program Development Phase

- Collect baseline data
- Conduct conceptual, operational, and empirical analysis to aid in program design
- Develop the evaluation plan
 - Identify the inputs, outputs, and outcomes to track
- Develop a standardized data collection tool
- Determine timeline for data collection
- Establish relationship of costs to outputs initially if cost effectiveness or benefit analyses will be required later



Prospective Evaluation: Key Features

Implementation Phase

- Collect data from grantees at determined points in time
 - 3 to 6 months after program starts to revise baseline
 - Consider frequency of collection thereafter
- Use data to inform programmatic changes at a logical future point



Conceptual, Operational, and Empirical Analyses

Select the most effective way of designing the program by conducting conceptual, operational, and empirical analysis

- Conceptual Analysis (why will the program work?)
 - Identify the assumptions, beliefs, and theory underlying the program
- Operational Analysis (how will the program work?)
 - Identify the award instrument, structure, and components—how it should be implemented
- Empirical Analysis (has a similar program worked in the past?)
 - Identify programs with similar assumptions and/or components that have worked in the past



Prospective Study Questions

Туре	Question	Action
New Programs Purpose: Anticipate the future	 What type of outcome (e.g., health, economic, and policies/regulations) would result from the program? What is the unit of analysis? What are the key assumptions of why the program should work? What is the underlying logic of this program? (What is the relationship among program components?) What are the factors beyond the implementers' control that may affect reaching the outcomes? 	 Collect baseline data Conduct literature review Review other programs with similar goals (within and outside federal agency) Review evaluation studies



Prospective Study Questions

Type	Question	Action
New Programs Purpose: Anticipate the future	 What award instrument will be used? How will the proposed program would operate? How components should be implemented – simultaneously, sequentially? Who are the direct beneficiaries of the program (e.g., individual, institution, society)? What are the funding sources and dollar amounts of the program? What are the administrative timelines of the program? Empirical: Historically, how well has this type of program worked? Are there pitfalls known from past experience that could be remedied? 	 Collect baseline data Conduct literature review Review other programs with similar goals (within and outside federal agency) Review evaluation studies

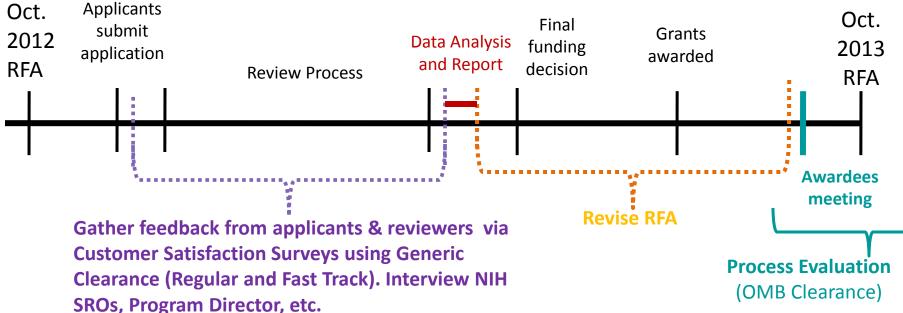


Prospective Study Questions

Question Type	Question	Action
Between Funding Cycles Purpose: Improve the future • Revise RFA, FOA • Modify program features/components	 What are the successes of the strategies implemented? What course of action had the best success and proved most appropriate for program? What features might be modified to improve success? Where are disconnects between program stakeholders? 	 Review annual program reports Review data from progress reports (tool specifically created for the program) Gather feedback from different stakeholders before next funding cycle



Between funding cycles: Example Timeline for data collection



Design for Preaward Phase

Purpose: revise RFA; revise strategies for initiative/program; assess how well the program is reaching the intended audience; adjust program components.

Data Collection Methods

Comment cards, complaint forms, focus groups, and online surveys.

Windrose

Design Evaluation for Post Award Phase

Purpose: assess quality of program implementation; assess variation in program implementation across settings,

Data Collection Methods

Site visits, interviews, case studies, social network analysis, document review, use administrative data

Programs Suitable for Prospective Evaluation

Programs

- High-risk/innovative research
- Trans-NIH initiatives (topic-specific)
- Large collaborative research
- High-budget programs
- Programs with novel approaches to identify research challenges and successful applications

Leadership or program managers have an interest in:

- measuring long-term economic impact
- expanding and/or replicating the program



Prioritizing Programs for Formal Evaluation



Factors to Consider for Formal Evaluation

Questions are designed to have "yes" or "no" responses (e.g., yes=1, no=0)

- Congressional—Does Congress have a high level of interest in this program?
- Institute's Research Priority—Has the institute or center labeled this program as high priority?
- Hot Topic—Is there a high level of interest in this program outside NIH (e.g., HHS, OMB, advocacy groups, professional organizations, etc.)?
- Budget—Is the program's funding level higher than similar programs?



Factors to Consider for Formal Evaluation (continued)

- **Process**—Is this program utilizing a new process for supporting research that could be applied to other programs?
- Scale Up—Is there high interest in expanding and/or replicating this program?
- Performance—Is there a lack of objective evidence suggesting that the program is meeting its goals?
- Features/Elements—Are there inherent program features/elements that may undermine the program's ability to reach its goals?



Factors to Consider for Formal Evaluation (continued)

- Components—Is there objective evidence suggesting that the program components are working well together to achieve program goals? (yes=0; no=1)
- Need—Is there objective evidence suggesting that the program is still meeting an unmet need? (yes=0; no=1)
- Awareness—Is there objective evidence that the program's target community (or beneficiaries) is aware of the products and services of the program? (yes=0; no=1)



Factors to Consider for Formal Evaluation (continued)

- Unanswered Question—Is there a critical unanswered question about the program?
- Impact—Is there high interest in measuring the long-term impact of the program after the program ends?

Other Factors to consider:

- Cost of the evaluation
- Burden to program staff, grantees, expert panel, etc.
- Evaluation activities conducted in-house and contracted out



Contact Information:

Madeleine.wallace@windrosevision.com

4031 University Drive, St. 100

Fairfax, VA 22030

Phone: 703-766-4674

